AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 35 as follows:

In the above-described first prior art adaptive motion direction detecting method, in order to accurately determine the motion direction of an object independent of a bright contour and a dark contour thereof, two-dimensional pixel data in each of the present areas are normalized by their maximum lightness and their minimum lightness to form bright contour data and the dark contour data. Then, motion directions of the object are determined in accordance with the bright contour data and the dark contour data, respectively. On the other hand, two-dimensional pixel data in each of the preset areas is caused to be binary data "1" when the lightness thereof is larger than a definite lightness, and two-dimensional pixel data in each of the preset areas is caused to be binary data "0" when the lightness thereof is not larger than the definite lightness. However, these techniques deteriorate the efficiency of motion detection. In addition, the presence of the two frame memories does not save the resource of memories.

Please amend the paragraph beginning on page 2, line 23 as follows:

In the above-described second prior art adaptive motion direction detecting method, however, since means for determining all gradients of the object are required, the resource thereof cannot be saved. That is, images statistically include horizontal displacement ; even in this case, spatial and [[tie]] time convoluting interactions for all the directions have to be carried out, which decreases the efficiency of the resource thereof.

Please amend the paragraphs on page 4, lines 1-9 as follows:

The present invention will be more clearly understood from the description set forth below, ~~as compared with the prior art,~~ with reference to the accompanying drawings, wherein:

Fig. 1 is a block circuit diagram illustrating an embodiment of the adaptive motion direction detecting apparatus according to the present invention;

Fig. 2 is a diagram of pixel data inputted by the image input unit [[1]] of Fig. 1;

Please amend the paragraphs on page 5, lines 26-29 as follows:

where $S_{m,}$ [[$_k$(t)]] k is a spatial response function; and

$T_n(t)$ is a time response function.

Also, the spatial response function $S_{m,}$ [[$_k$(t)]] k is represented by:

Please amend the paragraph beginning on page 5, line 33 as follows:

where λ_{ex} andλ_{inh} are coefficients for showing spatial spread of the pixel data for one response element ($\lambda_{ex} < \lambda_{inh}$, for example,$\lambda_{ex} : \lambda_{inh} = 0.25 : 1$); [[and]]

k is a constant between 0 and 1; and

Please amend the paragraphs on page 7, line 34, through as follows:

where x_i and y_i are an X-direction value and a Y-direction value, respectively, of the coordinate i[[.]] ; and

$x_{i'}$ and $y_{i'}$ are an X-direction value and a Y-direction value, respectively, of the coordinate i'[[;]].

Please amend the paragraph beginning on page 10, line 27 as follows:

100 × 100 × 1 bits (detection elements), and[[,]]